DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do **not include the following reference signs mentioned in the description:**

In para. 0019, lines 1-2, the video data 305 is not shown in figure 1.

In para. 0019, line 5, the pixels 315 is not labeled in figure 1.

In para. lines 14-17, the packetized elementary sequence 360 and the transport header 365a are not shown in figures.

In para. 0021, lines 1-2, the transport packers 345b is not found in figure 1.

In para. 0024, lines 4-10, the video elementary stream 355 is now shown in figure 2.

In para. 0025, line 2, the video data 305 is not shown.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following **reference characters not mentioned in the description:**

In fig. 2, there is no description on 470.

In fig. 4, there is no description on circuitry 550 and port 560.

In fig. 5, there is no description about the MUX 555(0)-555(31).

In fig. 5, there is no description about the port 560.

3. The drawings are objected to because of following **informalities:**

In fig. 5, it is unclear if the 611 is connected to input of MUX 555(1).

In fig. 6, block 730, it is unclear the logic of the flowchart. In particular, the 730 is a binary decision block. There is no condition leading to END.

In fig. 6, there should be an arrow from block 730 to block 735.

Claim Objections

4. Claim 19 is objected to because of the following informalities:

As to claim 19, claim must end with period.

Double Patenting

5. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

6. Claim 18 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 9 of prior U.S. Patent No. 7,284,072, hereinafter referring to as Pat'072. This is a double patenting rejection.

Claim 18 is comparing to claims 9 of Pat'072 in the following table:

Instant Application	**Pat'072**
(claim 18) a direct memory access controller, said direct memory access controller comprising:	(claim 9) a system for providing a plurality of sequential data words, said system comprising:
a state logic machine for receiving a single command to provide a range of sequential data words; and	a state logic machine for receiving a command to provide the plurality of sequential data words, wherein …
a memory controller for fetching a first portion of the range and a second portion of the range after fetching the first portion, wherein the second portion of the range has a lower address than the first portion, after the state logic receives the single command.	a memory controller for fetching a sequential portion of the sequential data words, said sequential portion comprising a first intermediate word, the last word, and one or more data words between the intermediate word and the last word; …

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 24-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24 recites the limitation "**the** predetermined amount" in line 9. There is insufficient antecedent basis for this limitation in the claim.

As to claims 25-27, they are depending on claim 24. Therefore, they are rejected as set forth above accordingly.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless – (a) the invention was known or used by others in this country, or patented or described in a printed

publication in this or a foreign country, before the invention thereof by the applicant for a patent.

10. Claims 18-27 are rejected under 35 U.S.C. 102(a) as being anticipated by Lee (U.S. Patent 6,842,219), hereinafter referring to as Lee'219.

Referring to claim 18, Lee'219 discloses **a direct memory access controller** (fig. 2, VDEC 203), said direct memory access controller comprising:

a state logic machine (fig. 4, state machine 404; and fig. 12, FSM 1206) for receiving **a single command** (fig. 5, control command 501; and fig. 6, command 601) to provide **a range of sequential data words** (col. 4, lines 24-29, access memory blocks); and

a memory controller (fig. 11, buffer controller 1113) for fetching **a first portion** (fig. 11, portion of VLD input buffer 1112) of the range and **a second portion** (fig. 11, portion of VLD input buffer 1112) of the range after fetching the first portion, wherein the second portion of the range has **a lower address than** (col. 10, lines 49-55, backward decoding; col. 15, lines 49-52, MPEG-4 rewinding, earlier frame has lower memory address) the first portion, after the state logic receives the single command.

Referring to claim 24, Lee'219 discloses a method for fetching data words, said method comprising:

receiving a single command (fig. 5, control command 501; and fig. 6, command 601) to provide **a range of sequential data words** (col. 4, lines 24-29, access memory blocks), starting **a beginning address** (col. 10, lines 49-55, backward decoding process, earlier packets) and ending at **an ending address** (col. 10, lines 49-55, backward decoding process, later packets);

fetching a portion (col. 6, lines 58-60, words), in **a forward address order** (col. 13, lines 33-35, increased address), of the range of **sequential data words** (col. 13, lines 33-35, bit stream), said wherein said portion of the range of sequential data words consists of [the]**a predetermined amount of data words** (col. 6, lines 58-60, four words) that conclude with and precede the ending address, and wherein the predetermined amount of data words is equivalent to **a capacity of a local buffer** (fig. 16, DBC MEM);

fetching, in the forward address order, at least one preceding portion (col. 13, lines 33-35, increased address) of the range of sequential data words, wherein each of the preceding portions of the range of sequential data words consist of the predetermined amount of data words; and

wherein **a one of the preceding portions** (col. 10, lines 49-55, backward decoding; col. 15, lines 49-52, MPEG-4 rewinding and error resilience, the point of error has beginning address) of the range of sequential data words comprises the beginning address, truncating those data words that precede the beginning address.

As to claim 19, Lee'219 discloses the direct memory access controller of claim 18, wherein the memory controller fetches the first portion of the range and the second portion of the range in **a forward address order** (col. 13, lines 33-35, increased address).

As to claim 20, Lee'219 discloses the direct memory access controller of claim 18, further comprising:

a local buffer (fig. 16, DBC MEM) for storing the first and second portions in **a forward address order** (col. 13, lines 33-35, increased address), said local buffer comprising **a plurality of data words** (fig. 16, DBC MEM, four words).

As to claim 21, Lee'219 discloses the direct memory access controller of claim 20, wherein the plurality of data words of

the local buffer are **narrower in width** (fig. 16, DBC MEM with 16 bytes vs. input stream in words) than the sequential data words.

As to claim 22, Lee'219 discloses the direct memory access controller of claim 20, further comprising:

a port (fig. 12, PMU IN) for transmitting the contents of the plurality of data words of the local buffer in **a reverse address order** (fig. 12, reversal logic).

As to claim 23, Lee'219 discloses the direct memory access controller of claim 22, further comprising:

at least one multiplexer (fig. 12, multiplexers inside 1203) for reversing the bit positions of contents of **at least one of the data words** (fig. 12, B DO[31:0]) of the local buffer.

As to claim 25, Lee'219 discloses the method of claim 24, further comprising:

loading (fig. 12, load into CLUST DEC 1202) the portion and the at least one preceding portions of the sequential data words into the local buffer.

As to claim 26, Lee'219 discloses the method of claim 25, further comprising:

reversing (fig. 12, reversal logic) the portion and the at least one preceding portions of the range of sequential data words.

As to claim 27, Lee'219 discloses the method of claim 26, further comprising:

reversing (col. 10, lines 49-55, backward decoding; col. 15, lines 49-52, MPEG-4 rewinding and error resilience, the point of error has beginning address) the truncated one of the preceding portions of the range of sequential data words that comprises the beginning address.

Conclusion

11. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See M.P.E.P 707.05(c).

US Patents

- Aggarwal'248 discloses command packet system and video decoding system.
- Yamane'905 discloses MPEG-4 data stream processing.

The examiner requests, in response to this office action, support be shown for language added to any original claims on

amendment and any new claims. That is, indicate support for newly added claim language by specifically pointing to page(s) and line number(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application. When responding to this office action, applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. 1.111(c).

In amending in reply to a rejection of claims in an application or patent under reexamination, the applicant or patent owner must clearly point out the patentable novelty which he or she thinks the claims present in view the state of the art disclosed by the references cited or the objections made. The applicant or patent owner must also show how the amendments avoid such references or objections.

Contact Information

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheng-Yuan Tseng whose telephone number is 571-272-9772, and fax number 571-273-9772. The examiner can normally be reached on

08:30-17:00 Monday-Thursday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Henry Tsai can be reached on 571-272-4176. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC central telephone number, 571-272-2100.

In order to reduce pendency and avoid potential delays, Group 2100 is encouraging FAXing of responses to Office actions directly into the Group at fax number: 703-871-9306. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 2100 will be promptly forward to the examiner.

/CT/

/Henry W.H. Tsai/
Supervisory Patent Examiner, Art Unit 2184